

Program Design & Customer Experience – Develop Implementation Plans

Description

This handbook is designed to help you move your program from conceptual design to a concrete implementation plan. Two other handbooks, [Develop Resources](#) and [Deliver Program](#), will guide you through the program launch and ramp up to an operational program. If you think of program design as the activity of an architect, launching the program is the activity of the builder.

The plans that the architect provides rely on the builder to make many decisions, based on the expertise and depth of knowledge that the architect may not have. In the same way that the builder reviews the architect's designs and then makes a plan to construct the house, you will review your program designs to identify everything that needs to be done in order to launch and operate your program. You will then use that information to develop a detailed implementation plan to make sure that everything gets done at the right time.

Dividing program implementation activities into categories of pre-launch, launch, and ongoing operations can help you break planning down into more manageable pieces. Your detailed plans for each of these categories combine to form your implementation plan.

- Key pre-launch activities include:
 - Determining how the program will work on a day-to-day basis once it is fully operational, including coordination among all of its components
 - Developing resources that need to be in place to launch the program
 - Developing and integrating specific plans for marketing, financing, and contractor recruitment and training
 - Developing a launch plan
 - Establishing who will be responsible for each activity during launch and subsequent ongoing operations.
- Key launch activities include:
 - Communicating that the program is “open for business”
 - Offering program services to customers for the first time
 - Coordinating with contractors, including recruitment, training, and ongoing project coordination
 - Assessing initial operations and adjusting operational strategies.
- Key ongoing operational activities include:
 - Providing ongoing customer services and coordinating among all program components (the [Deliver Program](#) handbook describes this process in more detail)
 - Conducting ongoing program evaluation and improvement to meet program goals and objectives (the [Develop Evaluation Plans](#) and [Assess and Improve Processes](#) handbooks describes these processes in more detail)
 - Communicating about program successes and lessons (the [Communicate Impacts](#) handbook describes this process in more detail).

Program Design & Customer Experience

Stages:

[Overview](#)

1. [Assess the Market](#)
2. [Set Goals & Objectives](#)
3. [Identify Partners](#)
4. [Make Design Decisions](#)
5. **Develop Implementation Plans**
6. [Develop Evaluation Plans](#)
7. [Develop Resources](#)
8. [Deliver Program](#)
9. [Assess & Improve Processes](#)
10. [Communicate Impacts](#)

on planning how the program will work when it is fully operational and how these operations will meet your [goals and objectives](#). When you understand and plan for the desired end state first, you can focus your implementation plan on ensuring that your program ends up achieving the goals and objectives you have established.

This handbook will walk you through the process of planning for a fully operational program and show you how to use that information to plan your pre-launch and launch activities.

- Throughout this process, you should stay focused on making it as easy as possible for a customer to participate in your program and for contractors to work with you.
- You will need to consider all of the behind-the-scenes activities that your program will need to carry out and the systems necessary to track your projects and document your results.

This handbook will also guide you in how to integrate planning activities for key components of your program, including specific plans for:

- [Marketing & Outreach](#)
- [Financing](#)
- [Contractor recruitment and training](#)

Remember that planning is an iterative process. For example, once you determine the number of homes you want to upgrade and estimate how many staff people will be needed, you may find that your plans will cost more than the funds you have available. In this case, you will either need to adjust your program objectives or identify additional funding.

While detailed plans serve as an indispensable guide, the real experience of launching and running a program can be messy. Unforeseen events will inevitably occur that might take you off course, and plans will need to be revised along the way. As you implement your program, keep expectations about results realistic. It takes time for programs to get up and running, get traction in a community, and transform local markets. Better Buildings Neighborhood Program partners found that they needed at least 2 years to research and design their program and become fully operational.

This handbook covers the following steps of implementation planning:

- Identify the components that will make up your program design.
- Use workflow diagrams to illustrate and refine program processes.
- Establish staffing requirements, roles, and responsibilities for all aspects of program implementation.
- Develop a program budget.
- Use a project management approach to integrate and sequence program pre-launch, launch, and operational activities.

The work products you develop in the steps outlined above provide you with a detailed implementation plan to prepare for, launch, and operate your program.

Find related information across other program components:

- **[Market Position & Business Model – Create a Business Plan](#)**
Create your organization's business plan, which describes how your operational and financial structure will support the delivery of energy efficiency services.
- **[Marketing & Outreach – Develop Implementation Plans](#)**
Develop a marketing and outreach plan that details your strategies and tactics, workflows and timelines, staff roles and responsibilities, and budget.
- **[Financing – Develop Implementation Plans](#)**
Develop a plan to implement your financing activities, with defined roles for financial institution partners, contractors, customers, and your program.
- **[Contractor Engagement & Workforce Development – Develop Implementation Plans](#)**
Develop contractor engagement, quality assurance, and workforce development plans that include strategies, workflow, timelines, and staff and partner roles and responsibilities.

Step-by-Step

There are several steps to developing an implementation plan.

Identify the program components your program will undertake

Planning for all of the different activities needed to successfully operate a residential energy efficiency program can be overwhelming, but not as overwhelming as being in the middle of running a program for which sufficient planning was not done. Developing the implementation plan for your program is best done by envisioning what your program will look like when it is fully operational (e.g., six to 12 months after launch) and then thinking about how to break the program into discrete components that together will allow your program to achieve your objectives.

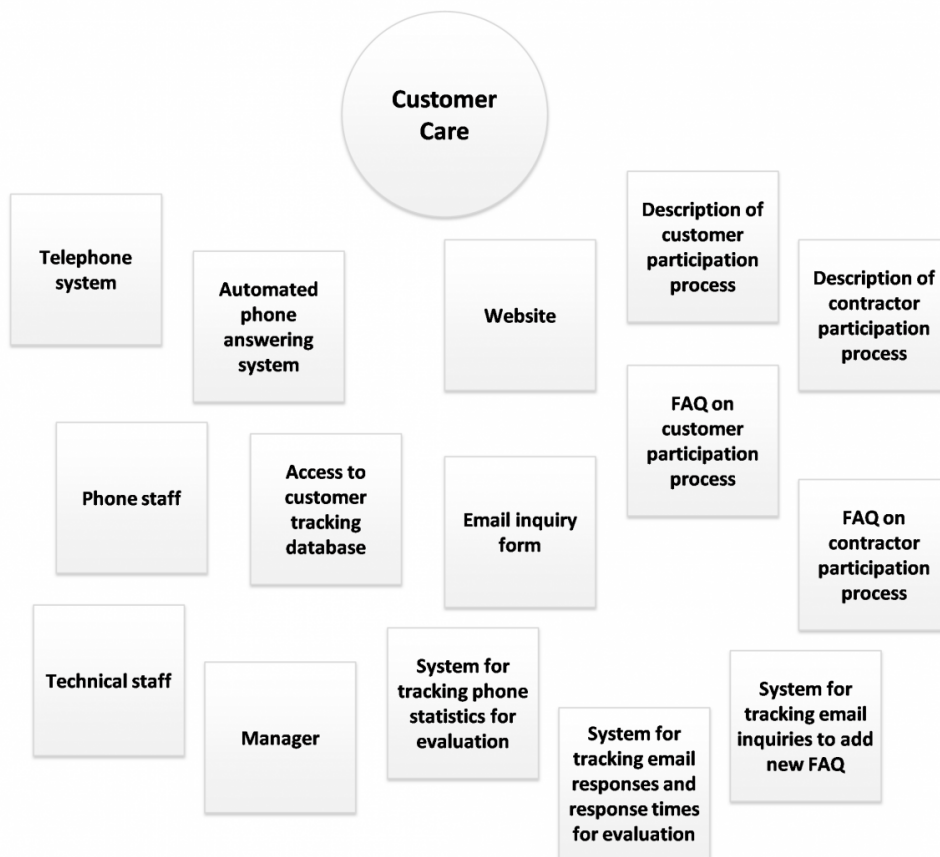
The main components of most programs are marketing and outreach, financing, contractor engagement and workforce development, and evaluation and data collection. Your implementation plan for the program should incorporate the specific implementation plans for each of these components. The Develop Implementation Plans handbooks for these four components are linked below:

- **[Marketing and Outreach](#)**
- **[Financing](#)**
- **[Contractor Engagement & Workforce Development](#)**
- **[Evaluation & Data Collection](#)**

In addition, some other operations may be useful to treat as discrete parts of a program for planning purposes. One example is customer care, which encompasses all of the activities that provide easy and reliable means for customers to get information about the program and their status within it. These activities are usually done through a customer service center (for phone, email communications, or web portal). Customer care serves as a useful example for illustrating how to build an implementation plan around individual pieces of a program; it is the focus of many examples in this handbook.

The illustration below shows many program resources clearly related to customer care. At the beginning of implementation plan development, they are not organized. They are just identified as important aspects of customer care—things your team has identified as important to ensure the program's success.

Illustration of Customer Care And Related Resources **Note: Resources represented by squares**



Source: U.S. Department of Energy, 2014.

At the completion of this step, you should have a list that identifies the major components of your program (e.g., marketing, financing, etc.) as well as lists that break down these components into individual pieces (e.g., customer care) and the resources related to each piece (e.g., a customer care email inquiry form).

Implementation Plan Templates

The Better Building Residential Program Implementation Plan Template will help you develop a strategy for planning, implementing, and evaluating a successful residential energy efficiency program ([Microsoft Word Version](#); [Microsoft Excel Version](#)). Individual implementation plan templates are also available for each of the six program components:

- [Market Position & Business Model](#)
- [Program Design & Customer Experience](#)
- [Evaluation & Data Collection](#)
- [Marketing & Outreach](#)
- [Financing](#)
- [Contractor Engagement & Workforce Development](#)

Home Performance with ENERGY STAR also provides a [plan template](#) to accompany its [program design guide](#).

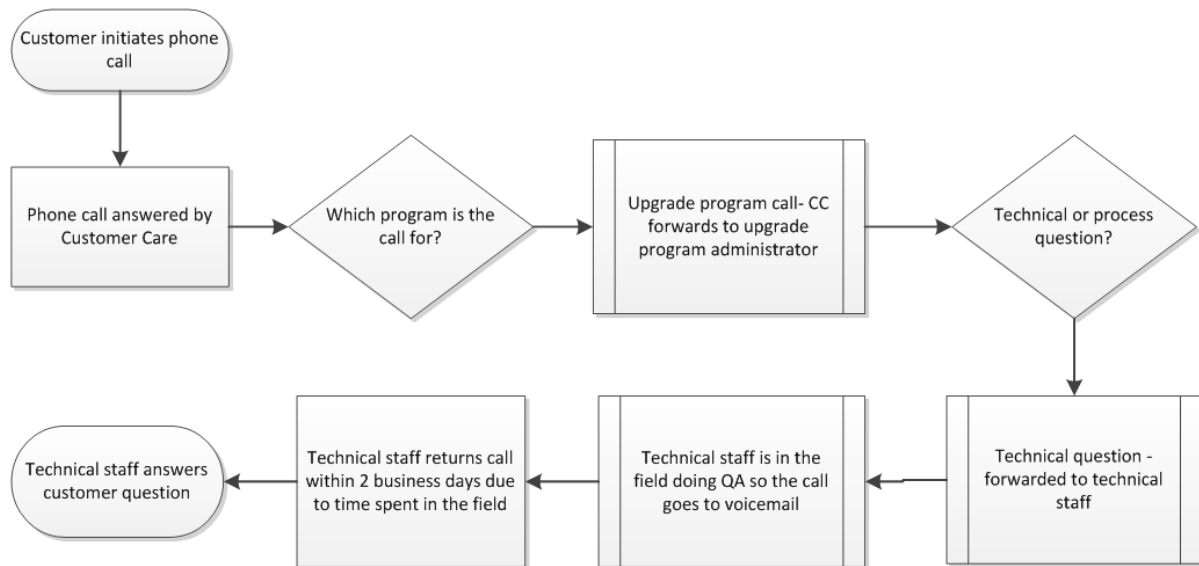
Use workflow diagrams to illustrate and refine program processes

Workflow diagrams are a useful way to represent sequential processes for programs as a whole and for specific components. For example, they can show the steps that a customer needs to take in order to complete a home energy upgrade or show the activities that contractors or internal staff need to take to operate the program.

Workflow diagrams can help you make sure that your process is as streamlined as possible, that there is a logical flow to the required activities, and that all of the critical steps in the process are accounted for. Workflow diagrams are usually more useful for mapping recurring processes than for showing the steps needed to complete a one-time activity.

The example diagram below shows nine steps in the internal process to respond to a customer phone inquiry as part of customer care. In looking at this diagram, can you see any opportunity to streamline the process?

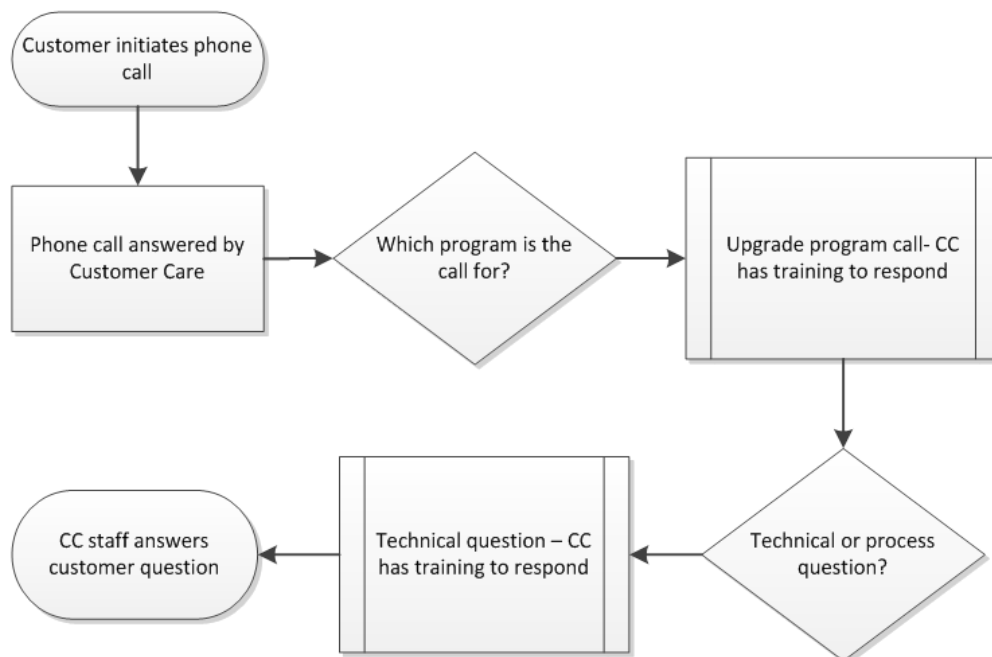
Illustration of Possible Workflow for Customer Phone Inquiry



Source: U.S. Department of Energy, 2014.

The second version (below) shows that two steps can be eliminated by providing additional training to the customer care staff. This adjustment results in a more efficient process, reduced staff time needed to respond to the inquiry, and a much happier customer! The use of the workflow diagram makes the inefficiency of the original process easy to see.

Illustration of Possible Workflow for Customer Phone Inquiry (Streamlined)



Source: U.S. Department of Energy, 2014.

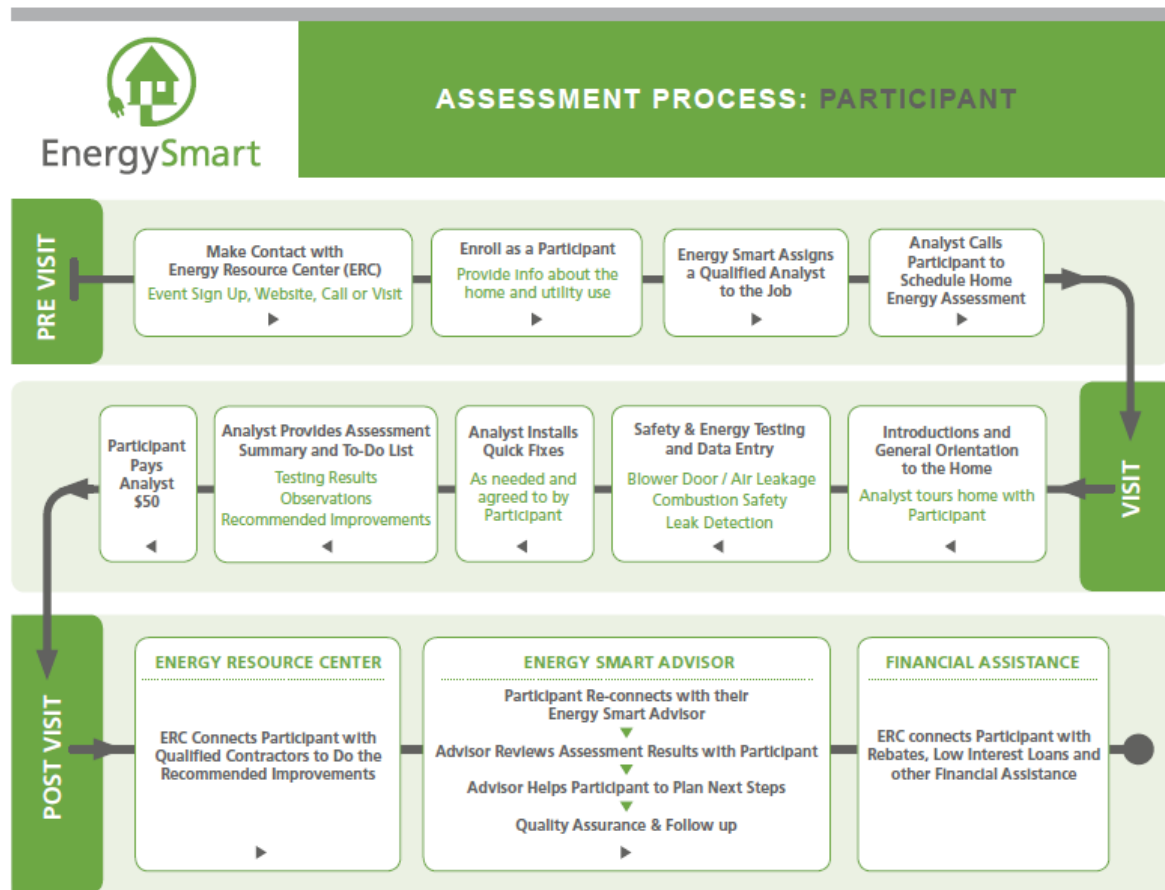
Workflow diagrams are also useful in getting a clear picture of what you are asking customers and contractors to do. If you are asking too much of them, they probably will not agree to do it unless you are giving them a deal too good to refuse, such as large incentives (in the case of customers) or substantial business opportunities (in the case of contractors). Mapping this out helps you think about whether your program is making it easy for customers and contractors do what you want them to do, and, in the process, providing needed market coordination services. The same is true for program partners whose cooperation you rely on for your program to succeed.

Energy Smart Colorado: Going With the Flow for Customers

In Eagle County, Colorado, the Energy Smart Colorado program developed the [flow chart](#) below to illustrate the process its customers would go through when they participate in the program. This flowchart identifies 12 discrete steps of the upgrade process. Each of the steps shown contains additional sub-steps, which illustrates the importance of simplifying processes as much as possible.

Flow charts are a good way of organizing and communicating how your program design translates into your customers' experiences with the program. These types of flowcharts can also illustrate other aspects of programs, such as interactions with contractors and quality assurance processes.

Energy Smart Flowchart—Assessment Process: Participant



Source: [Assessment Process: Participant](#), Energy Smart Colorado, 2011.

See additional flow chart examples from:

- [Green Jobs Green New York](#), which includes two flow charts, one that illustrates the process starting with customer interest to final incentive payment, and another that illustrates the program's quality assurance process.
- [Better Buildings Greensboro](#), which shows key steps and relationships for the residential energy efficiency program in Greensboro, North Carolina from initial customer interest through upgrade completion.
- [Michigan Saves](#), which includes two flow charts depicting Michigan Saves' residential and non-residential program including program process and cash flows.
- [Austin Energy](#), which illustrates the integration of key process steps for the program's "Best Offer Ever" promotion. Among other things, Austin Energy used this flowchart to help identify process bottlenecks for the program.

Having a clear picture of the activities required for critical program processes will help you decide how much staff support will be needed to operate your program, and will also help you group activities into job descriptions and areas of responsibility.

At the completion of this step you should have a set of workflow diagrams. At the very least, you should have a workflow diagram for customer interactions and for interactions with contractors. Depending on the complexity of your program you may want workflow diagrams for other critical processes in your program operation as well.

Establish staffing requirements, roles, and responsibilities for all aspects of

program implementation

Estimating the number of hours and the number of people that it will take to operate your program can be difficult, especially if you are developing a new program with which you do not already have direct experience. One approach is to build up from estimates of how many hours each activity will take and to group these activities into jobs based on the types of skills and knowledge that are required.

Different programs use different approaches to similar activities. For example, some programs might have technical field staff who perform energy assessments of homes and then enter the field data into an analysis tool themselves. Other programs might have technical office staff who enter the field data into the analysis tool. Either approach can work—there is not one right way to do it.

Generating accurate estimates of hours needed to accomplish specific activities is difficult. That is why it is also important to group related activities into jobs and to apply common sense when thinking about how much a person can realistically do in the amount of time available for each job.

As you group activities into jobs, you will need to think about the skills and knowledge that each job requires. For any positions that touch on technical issues in houses, having staff possess the same types of [technical certifications as home performance professionals](#) is highly advisable. It can be helpful for office and customer care staff to have some technical knowledge as well.

If you already have a core staff to run your program, it will be important to assess their strengths and compare those with the skills that you have identified as needed to run the programs. This step allows you to identify any significant gaps that will need to be filled either through training, additional hiring, or contracting. If you plan to hire staff for your program, you can use the estimates of hours and skills needed that you carried out above to develop job descriptions and an estimate of the number of people you will need to hire.

You can group related activities into jobs to determine areas of responsibility. This step can be critically important in a start-up operation when there will inevitably be unforeseen issues that need to be addressed. You run much less risk of having issues come up that nobody feels responsible for if staff roles are defined by area of responsibility rather than just by groups of activities, and if you look at all of the areas of responsibility together to assure that there are no gaps.

Activities—Not Grouped into Jobs



Source: U.S. Department of Energy, 2014.

The picture above, for illustration purposes only, shows a sample selection of activities that need to occur to operate the program. The picture below shows the same activities, but grouped together based on those that require similar skills and levels of responsibility. These groupings can be developed into areas of responsibility, job descriptions, and numbers of estimated levels of effort for those jobs depending on the goals, objectives, and available funding for the program.

Activities—Grouped into Jobs



Source: U.S. Department of Energy, 2014.

Involving the people who will be doing the work can be instrumental in increasing the accuracy of your estimates and the efficiency of your processes. For example, if one person is responsible for the process of making sure that critical customer data are tracked so that incentive checks can be issued, that person should ideally also be responsible for making sure that nothing critical in that process is missed in plans. This approach is in contrast to one in which the planners list out all of the steps that the person needs to accomplish without giving that person the responsibility to adjust or improve the process. It is also possible to assign areas of responsibility to teams of people (as long as there is good communication between the team members). In this way, you can help prevent the “I thought he was working on that” effect and the resultant gaps in service that can occur.

Clearly assigning areas of broad responsibility to individual positions and then including the high-level activities as you understand them can then be used as the basis for drafting job descriptions. Assign appropriate salaries and benefit costs to the job descriptions to develop an estimate of the labor costs required to operate your program.

At the completion of this step, you should have a list of staff positions that identifies the areas of responsibility and key activities that will be assigned to each position. You should also know the number of people you will need for each position, and the supervision structure for the team.

Develop a program budget

Most residential energy efficiency programs are limited by the amount of funding available to them than by any other factor. It is therefore critically important to understand the funding that is available to your program as early in the planning process as possible so that you can plan realistically for any limitations that might result. Funding sources and amounts should be analyzed in your program [business and financial plans](#).

If your goals and objectives are not consistent with the financial constraints that you face, you are likely to be disappointed with the outcomes. You should expect that program implementation planning and budgeting are iterative, linked processes that you will continue to refine until the planned program objectives are consistent with the available budgets.

Depending on the scale of your program, it might make sense to develop separate budgets for each component. For example, you may have specific budgets for [marketing and outreach](#), [financing](#), [contractor engagement and workforce development](#), and [evaluation and data collection](#).

When you have completed the steps above, you will have an understanding of the activities comprising your program, the time it will take to carry them out, and a general idea of how many homes you hope to upgrade through your program:

- You can then estimate the total program costs.
- You can also see how your budget compares with the funding that might be available to you.
- If you are operating in a utility or regulated environment, you can analyze the program's cost-effectiveness to ensure that it meets any required criteria.
 - For more on cost-effectiveness, see resources provided by the [California Public Utilities Commission](#) and an [overview](#) developed by the Regulatory Assistance Project.

Many efficiency programs, at a minimum, budget and track costs in the following categories:

- Incentives, which are paid directly to customers or contractors for completing upgrade projects
- Financing costs, such as interest buy-downs
- Labor costs and benefits for employees
- Program implementation subcontractor labor (sometimes called third-party or outside services), such as the costs of a subcontractor hired to manage or implement your program
- Contractor engagement and training
- Other direct costs (ODCs), such as travel, staff training, rent, utilities, and office supplies,
- Marketing costs
- Regulatory costs (if any).

Budgets are usually developed for at least one year in advance and show costs in all of the above categories for each month. Note that your funders or your organization's accounting practices may dictate requirements for the timeframe of your budget, what it includes and how it is organized and presented.

At the completion of this step, you should have a budget that shows estimated expenses by budget category, by month, with subtotals for each budget category by year.

Use a project management approach to integrate and sequence program pre-launch, launch, and operational activities

Through the first four steps of crafting an implementation plan that you have completed so far—identifying components, developing workflow diagrams, establishing staffing requirements, and budgeting—you will have developed a good working understanding of what your program will look like and the resources it will require to operate. Now you need to take that information and plot the course that will get you there.

Because so many activities need to take place prior to and during program launch, take a project management approach for identifying and keeping track of those many steps. The “project” is the program preparation and launch, and it is finished when all of the components are in place and your program is operating.

The Internet offers a universe of resources to choose from on this topic, such as the [Project Management Institute](#), [Mind Tools](#), and [projectmanagement.com](#). Many university continuing education programs and private consultants also offer training. Only the most basic approach will be described here.

While many types of documents are useful in managing a project, the two most critical are the project charter and the project plan. The project charter describes *what* the project is, and the project plan describes *what will be done*, *when*, and *by whom*.

Project Charter

The primary purpose of the project charter is to document key aspects of the project so that everyone involved can have a shared understanding of what is being undertaken and why. The project charter should answer the following questions:

- How would you describe the project?
- What are the objectives of the project?
- Who has overall responsibility for managing the project to ensure that all necessary activities are done according to specification and on time? This person is commonly referred to as the project manager.
- Who, in addition to the project manager, will be working on the project?
- What are the major milestones for the project? What are the risks that could keep the project from succeeding, and what are the contingency plans to mitigate those risks?
- How much will the project cost?

Project Plan

The primary purpose of the project plan is to identify the following project details:

- What are the critical activities that must be accomplished in order for the project to succeed?
- How much time will be required between start and finish for each of the activities?
- What is the optimal sequence in which the activities should occur?
- What are the dependent relationships between activities? In other words, what activities must be completed before other activities can be done?
- What are the project deliverables, and when must they be completed?
- What are the project milestones?
- Who on the project team has primary responsibility for which activities? Who else on the project team is working on which activities?

The process of developing the project plan to prepare for and launch your program is a fairly simple one—at least in concept. First, look at each component of your program and identify all the things that you will need to do in order to get the program fully operational. Then decide the most effective order in which those things should be done.

Even though the approach is simple, the details are critically important. There are usually more details to think about than you first expect. Some project managers find it most useful to list every single activity in a project plan, while others prefer to list only the critical activities in the plan and to assign clear responsibility for management of them. The people in charge of those critical activities might choose to create their own project plans that focus on the details of their area of responsibility.

To brainstorm and organize activities for each component, identify as many activities as you can that need to occur in order to make the program fully operational. Include people in the brainstorming who have direct experience with the program aspects being planned because they will invariably identify details that planners and managers fail to see, such as the optimal sequencing of events. This group can also help by identifying “critical path” activities (i.e., those activities that will stop forward progress if they are not completed on time). Identifying critical path activities helps ensure that progress on those activities is carefully monitored and that any delays or impediments are addressed promptly.

Effective Sequencing of Program Activities

The sequence of activities in a program implementation plan is important. For example, the program team and customer process flow need to be developed and contractors need to be identified before you start advertising services. Otherwise, you will have potential customers who are unhappy because they cannot get their projects completed. In project management parlance, when an activity cannot be completed because another activity needs to be completed first, then there is a dependency between them.

There are typically many activities that can occur at the same time—or in parallel—in order to launch the program as soon as reasonably possible. If you approached every activity in sequence, it would delay the launch of your program considerably and also reduce its chances for success.

Austin Energy realized the importance of advance planning and sequencing when it launched its “Best Offer Ever” initiative. This time-limited offer ramped up customer demand for contractor services, but had the unintended consequence of increasing the amount of time it took contractors to schedule and complete upgrades because they were so busy meeting demand.

As a result, many customers’ loan preapprovals expired before the upgrades were begun. This created additional delays, because customers had to get re-approval for financing. It was costly for lenders and burdensome for customers and created an additional scheduling challenge for contractors.

Austin Energy remedied the program by updating contractors every week on when customers’ loan pre-approvals would expire. With this information, contractors could prioritize these customers when scheduling work. For more about this example, see the case study from the U.S. Department of Energy, [“Spotlight on Austin, Texas: Let Your Contractor Be Your Guide for Big Rewards.”](#)

Project Management Tools

Many project management tools are available. Some are low- or no-cost, and others are highly sophisticated and expensive customizable software programs. Many of these tools provide electronic templates or databases for detailed project plans. These tools are designed to help you track activities, areas of individual or group responsibility, timelines, and progress. Project plans using fairly simple spreadsheet models can also be effective for less complex projects. In either case, what is most important is that the activities are organized thoughtfully, that the project manager keeps track of progress, and that progress is effectively and regularly communicated to the project team. For an example of a narrative project plan, see the [implementation plan](#) developed for several energy efficiency programs in Colorado.

A Gantt chart is a commonly used tool for documenting project plans:

- Gantt charts list activities in a hierarchy on the left side of the chart.
- They show when each activity is supposed to be completed by including a timeline from left to right across the top or bottom of the chart.
- The hierarchical organization shows each activity grouped by component and arranged in the chronological order in which they need to take place.
- These charts can be used to illustrate dependencies (i.e., where some activities cannot be completed until “predecessor” activities are completed).

For examples from residential energy efficiency programs, see the [project timetable](#) for [Austin Energy’s](#) residential energy efficiency program and the [implementation plan](#) developed by Seattle’s [Community Power Works](#).

To tie all of the pieces of your plan together, Gantt charts for each of the components can be incorporated into a single Gantt chart that shows:

- When each activity needs to occur in relation to all of the associated activities
- How long each activity is expected to take
- Who has lead responsibility for each activity
- The milestones along the way to completion.

Using a Gantt chart to show all of the important activities and when they need to occur makes it much more likely that your program launch will not be delayed because critical activities were missed. Putting all of the components and activities together into a single chart allows you to see the sequencing and timing for the entire program launch.

Because Gantt charts are most suited to showing the process for completing one-time rather than recurring activities, they can be a very useful project management tool in advance of and during a program launch. They are less useful, however, as an overall management tool once programs are up and running. Tools for ongoing management of your program will be discussed in the [Develop Resources](#), [Deliver Program](#), and [Assess and Improve Processes](#) handbooks.

Example Project Plan for Customer Care

To illustrate the project planning process, the information below shows how you would address customer care using the steps in this handbook.

Step: Identify the major program components required for successful program management, delivery, and evaluation

After you have identified major program components, assume that you think making sure that customers can easily get the program information that they need—and can quickly and easily get any questions and concerns resolved—is critical for your program's success. You will need to address it in the project plan so that customer care will be operational at program launch.

You have decided that you will need to have customers be able to reach a list of frequently asked questions online and a live person by phone during business hours. You want the person who answers the phone to be able to respond to basic program process questions (e.g., "I'm wondering when my rebate check will come in the mail") and to be able to check the status of a particular customers' project. You also want the ability to send callers to qualified staff people when they have technical questions (e.g., "My contractor says I should insulate my attic instead of replacing my windows—is that right?") and to the program manager when they have complaints (e.g., "The contractor filled my closet with insulation—who is going to pay to have the closet cleaned?").

As a result, you break down customer care into the following pieces:

- Frequently asked questions development and maintenance
- Customer care personnel training and staffing
- Telephone system purchasing and maintenance
- Customer care interface for project tracking system (e.g., to answer questions about project status)
- Customer care access to qualified technical staff and program managers

Step: Use workflow diagrams to illustrate and refine program processes

Using workflow diagrams, illustrate:

- The process a customer will go through when he/she has a question or complaint
- The process a customer care staff member will go through in responding to a question or complaint
- The process qualified technical staff or program managers will go through when contacted by a customer care representative

Use the workflow diagrams to identify overlooked critical activities and opportunities to streamline your processes.

Step: Establish staffing requirements, roles, and responsibilities for all aspects of program implementation

Given the roles and responsibilities identified above—customer care phone staff, technical staff to respond to questions, and a program manager to respond to complaints—determine how much staff time would be required to develop and staff customer care activities once the program is fully launched. Determine whether this requires new staff positions, and define roles and responsibilities for all staff involved.

Step: Develop a program budget

Based on the staffing requirements, equipment (telephones, etc.) and materials (e.g., frequently asked questions), calculate the cost of customer care.

Step: Use a project management approach to integrate and sequence program pre-launch, launch, and operational activities.

Map out the activities that must be done in order to implement customer care activities and determine how long it will take to accomplish these activities. As shown below, a Gantt chart is a good tool for representing these decisions and the relationships between activities. (In the chart, "X's" represent the week in which activities are undertaken.)

Customer Care Gantt Chart

		Weeks Since Project Started											
	Lead	1	2	3	4	5	6	7	8	9	10	11	12
CUSTOMER CARE													
1	Telephone System		Weeks 1-8										
2	Automated answering system	Richard	Weeks 1-4										
3	Purchase system				X								
4	Develop scripts and routing				X								
5	Identify and hire primary telephone staff	Paul	Weeks 2-6										
6	Develop job description		X										
7	Set salary range		X										
8	Advertise, interview, hire				X	X	X						
9	Develop tracking database interface for phone staff	Shanika	Weeks 2-7										
10	Identify key data points		X										
11	Work with IT developer to create and test interface			X	X		X	X					
12	Develop training plan	Viju	Weeks 4-7										
13	Key messages and Customer Care principles				X								
14	Database access							X					
15	Protocols for forwarding calls to tech staff					X							
16	Training plan for tech staff						X						
17	Protocols for forwarding calls to manager					X							
18	Develop phone metrics for evaluation and QA	Gwen	Weeks 5-8										
19	Work with IT developer to ensure tracking capability							X	X				
20													

Source: U.S. Department of Energy, 2014.

You should follow this project planning approach for each of your program's components. The handbooks on [Marketing & Outreach](#), [Financing](#), and [Contractor Engagement & Workforce Development](#) provide details on what to include in plans in those areas. Those plans should be incorporated into your overall implementation plan covering pre-launch, launch, and full operations.

Planning for the most effective timing of the different components leads to a smoother launch and a better customer experience—both of which are necessary for growing program participation. Mapping out all the critical activities for program launch and incorporating them into a Gantt chart provides you with a powerful tool for keeping track of everything that you will need to do in order to make your program available to customers.

Tips for Success

In recent years, hundreds of communities have been working to promote home energy upgrades through programs such as the Better Buildings Neighborhood Program, Home Performance with ENERGY STAR, utility-sponsored programs, and others. The following tips present the top lessons these programs want to share related to this handbook. This list is not exhaustive.

Keep the program simple for your customers

Given all of the other things that compete for your audience's attention, it is critical that program participation steps are straightforward and easy to understand. Many programs have found that too much complexity makes it harder for interested homeowners to complete upgrade projects. These programs have focused on streamlining services, requiring as few steps as possible for customers, and keeping the message about the upgrade process simple.

- [Enhabit](#), formerly Clean Energy Works Oregon, provided a **“One-Stop Shop” Home Energy Remodel** process to guide customers through a four-step process: apply, assess, finance, and transform. This simple process gave customers access to a comprehensive package of services that included low-interest financing and rebates, free energy assessments, assistance from an independent energy advisor, and the option to repay monthly loan obligations through their heating utility bills. To keep the process simple for customers and, in the process, improve program administration efficiency, Enhabit focused on process automation through its internal project tracking system.
- Recognizing that many different types of energy efficiency financing and rebates were available to its customers—but that it could be overwhelming to sort through them all—[RePower Bainbridge](#) helped customers access aggregated information by creating a [consumer-friendly guide](#) to all utility and non-utility incentives in its service area. The local utility benefited from the guide as well—it made the guide available to all of its customers.

Provide customers with a single point of contact to help them through the upgrade process

While homeowners may be interested in the benefits of an energy upgrade, many are deterred from completing an upgrade project because of the complex and unknown process. Often, a significant portion of homeowners who receive energy assessments do not continue with the upgrades. As part of the Better Buildings Neighborhood Program, multiple programs across the country tested a range of customer service strategies through a single point of contact to guide homeowners through the entire upgrade process. These program staff members are often called energy advisors or energy coaches and can provide a combination of services to help customers overcome barriers to home energy upgrades.

This approach – identifying barriers and providing targeted services through dedicated energy advisors to overcome them – has produced higher conversion rates and more satisfied customers; however, these services can also be time-intensive and increase the cost of program delivery. For more information on utilizing energy advising services to minimize informational, decision-making, and transactional barriers faced by homeowners, see [Energy Advisors: Improving Customer Experience and Efficiency Program Outcomes](#).

- [EnergySmart](#) in Boulder County, Colorado, found that having an energy advisor assigned to each program participant through the home energy upgrade process was a key to program success. Energy advisors built trust with the customer during an initial home visit and maintained a one-on-one relationship with homeowners throughout the process. Energy advisor services included installing low-cost measures, reviewing the assessment report and work scope, assisting with contractor selection, and helping with program paperwork. The relationship endured after the upgrade: after they completed their first upgrade, program participants frequently continued to stay in communication with energy advisors about additional projects and questions. Through customer surveys, Boulder found that 97% of customers rated their energy advisor as professional, knowledgeable, and timely. These customers agreed that “working with my Energy Advisor has been worth my time and effort.” In Boulder, around 60-70% of homeowners enrolled in the program took actions to upgrade their homes.
- Energy advisors for [Enhabit](#), formerly Clean Energy Works Oregon, provided education, objective advice on the assessment report and work scope, and quality control to customers across nearly half of the state. Program staff helped customers initiate the process by scheduling a home energy assessment, and they provided a quality control review following upgrades. Advisors also monitored the progress of each project through internal project pipeline status reports, which helped reduce bottlenecks and minimize customer frustration. The energy advisor strategy helped Enhabit achieve a 94% customer satisfaction rating during the program pilot. Enhabit found that in some cases—such as having energy advisors present at assessments conducted by high performing contractors—the program could reduce energy advisor services without impacting customer satisfaction or reducing the number of upgrades completed. This knowledge allowed the program to reallocate their resources.

- The [Denver Energy Challenge](#) provided customers with free energy advisor services starting with an initial phone call. The energy advisors helped customers by identifying available rebates and financing options, finding qualified home improvement contractors, reviewing bids, providing education on energy improvements, and even connecting qualified residents with other free or subsidized energy improvement services outside of the Denver Energy Challenge. As a result of this support, nearly 75% of customers who worked with an energy advisor went on to complete a home energy upgrade.
- [NeighborWorks of Western Vermont](#) staff scheduled all contractor visits for its customers residing in small towns across Rutland County. Once contractors completed home energy assessments, energy advisors reviewed assessment reports with customers. This review helped customers understand the content of the reports and prioritize improvements to be undertaken based on their needs and budgets. Energy advisors helped customers apply for financing (as needed) – a common point in the upgrade process where projects stall – and move on to the next steps. The energy advisor acted as the customer's primary point of contact for information about the assessment and upgrade process. This approach contributed to the program's success in completing over 600 upgrades from 2010 through 2013.
- [Greater Cincinnati Energy Alliance](#) (GCEA) energy advisors helped homeowners through every aspect of the upgrade process, from requesting an assessment to hiring a contractor. The program found that offering energy advising services through one individual person – the energy advisor – made potential customers more comfortable with the program, even if many customers did not actually contact the advisor. This hands-on customer service increased the number of completed upgrades and ensured that a high standard of quality was maintained throughout the process.

Keep the program simple for your contractors

Program administrators learn early on that they should minimize the burden for contractors entering and participating in the program. Satisfied contractors are a key to satisfied customers and successful programs. Many programs have realized that they should streamline program processes, minimize changes over time and communicate early with contractors about new offerings and potential changes. To reduce contractors' reporting costs and help ensure timely and complete reporting, these programs have streamlined contractor reporting forms and requirements as much as possible. Many programs also avoid making contractors meet locally-specific certification requirements, instead requiring certification from nationally recognized programs. For more on working effectively with contractors, see the [Contractor Engagement and Workforce Development handbooks](#).

- [NeighborWorks of Western Vermont](#) focused on listening to the needs, wants, and issues of contractors, so the program could help them serve customers most effectively. The NeighborWorks program held individual monthly meetings with each contractor to review client status, as well as bi-weekly group contractor meetings to review program issues, alert contractors to any changes in the program, and provide learning opportunities.
- [Enhabit](#), formerly Clean Energy Works Oregon, has been very successful in engaging contractors in regular, ongoing communication and making adjustments to the program in response to contractor feedback. For example, when Enhabit engaged a new financing partner, the program asked contractors to examine the loan product and approval process. Leadership of the [Home Performance Contractors Guild of Oregon](#), an organization that provided a unified voice and formal role for program contractors, identified that the timing of loan signings came too late in the contractor sales process. The guild said the financing product would not be of much use to contractors because contractors would have to expend considerable effort in a project before knowing if their customer could get a loan to pay for it. As a result, Enhabit renegotiated with the financing partner to put the loan signing earlier in the sales process. For more information, see the case study [Making the Program Work for Contractors](#).

Make sure there are enough customers in your target market to meet your goals and attract partners

Many programs that focused on a specific neighborhood or other small geographic areas have found it difficult to generate enough customer interest, partner interest, and upgrade activity to meet program goals. Regional or statewide approaches are often more attractive to contractors, lenders, utilities, and other partners than smaller markets defined by neighborhoods or city boundaries because they align with more typical service territories. Programs have found that larger contractors often are not interested in working in multiple cities or towns that have varying qualifications procedures and incentive rules. Utility partners are often better able to engage with a program offering services across a large segment of their customers. Historically, credit unions, community banks, CDFIs, and national lenders already specializing in energy efficiency loans have been more receptive to partnerships with residential energy efficiency programs.

- [Be SMART Maryland](#) shifted away from a volunteer-driven, neighborhood-by-neighborhood approach in favor of marketing through contractors and local community organizations to a broader geographic area. The program found it difficult to manage marketing and outreach to diverse geographic locations with the neighborhood approach (e.g., volunteer networks were difficult to engage and inconsistent from community to community). The adjustment in marketing strategy and target audience definition expanded Be SMART Maryland's service area, proved to be more effective in generating interested customers, and made the program more attractive to qualified contractors.
- [Community Power Works](#) (CPW) in Seattle found that its geographic scope was too narrowly focused when it first began providing services. At that time, CPW was focused on specific areas of the city, including many low-income neighborhoods. These geographic boundaries limited the number of potential customers, and many residents in these areas did not have the financial ability to invest in energy efficiency upgrades or access financing. CPW achieved significantly higher results once it expanded its geographic scope to the entire city in early 2012, more than doubling the number of eligible households. The expansion of the service territory—along with other program changes, such as simplifying and increasing incentives and offering new financing options—significantly boosted the number of upgrades per month from around 10 per month in late 2011 to around 50 per month in mid-2012. For more information, see Seattle Community Power Works' [Fall 2012 Progress Report](#).
- [Energize Phoenix](#), which focused its program on a central downtown light rail corridor, expanded its service area after a year of operations in late 2011 to increase the number of homeowners eligible for upgrades and unite neighborhoods that the previous boundaries had unintentionally divided. After the program launched, managers realized that the original program boundary, scaled down to better match funding amounts, divided close-knit neighborhoods and didn't correspond to traditional media and market boundaries. The program found that it was hard to target its marketing and outreach only to residents in the service area without also reaching those ineligible for the program. Especially in tight-knit neighborhoods, this created discord over who qualified for the program and who did not. When the program expanded the service area in 2011 to cover entire neighborhoods, it increased its geographic area by 55% and increased the number of eligible residential parcels by 77%. This helped drive an increase in single family and multifamily upgrades in 2012 and 2013. After three years in operation, the program upgraded over 2,000 housing units. For more information on the program and the expansion of its service area, see Energize Phoenix's [Energy Efficiency on an Urban Scale, Year Three Report: Results](#).
- [New Hampshire's Better Buildings program's](#) original upgrade goals were based on the state's Climate Action Plan and some general knowledge about the demographics of the three participating communities in the program. As the program began to unfold, however, the program noticed significant differences between the estimated number of projects and the actual level of demand. The projections were likely high because the original estimates were based more on need (i.e., how many buildings the state should upgrade), rather than an analysis of the existing market demand and potential for expansion. By the end of the grant period in 2013, a suite of efforts, including increased marketing and a statewide expansion of its residential program helped the program exceed its revised residential upgrade goals.

Develop partnerships based on an alignment of goals, strong collaboration, and consistent communication

Programs that have developed strong and lasting partnerships have done so by identifying shared goals and seeking ways in which programs and partners can mutually benefit by advancing each other's missions. Even if partners don't have the same goals as your program, you can still try to find ways to work together that improve the success of both efforts. Several programs have established forums for regular communication with partners, such as a steering committee or stakeholder group that meets monthly or quarterly, to maintain collaboration and communication. Informal events—such as engaging with partners after hours in a social setting—have proven to be successful at building trust and camaraderie. One key lesson from programs that have established robust partnerships: remember that partnership development often takes more time than planned.

- The [Better Buildings Program San Jose](#) leveraged local, well-known organizations that delivered non-energy services to low-income residents to help the program reach interested homeowners. Most Holy Trinity Catholic Church and the local Boys and Girls Clubhouse offered the program space for events where they could meet with homeowners, teach them more about the program, and schedule home energy assessments. To help low-income residents cover the cost of home energy evaluations and upgrades, the program also created a partnership with Pacific Gas and Electric's Moderate Income Direct Install program (which offered free home energy assessments and weatherization services to income-qualified residents) to allow all program customers into the utility's program. To learn more about the Better Buildings Program in San Jose, see the case study ["San Jose, California, Partners with Established Community Groups to Win over Homeowners"](#).

- Early in its program, [EnergyWorks](#) in Philadelphia established a partnership with its local gas utility, Philadelphia Gas Works (PGW), to share lessons learned and customer information, including sharing energy use data once customers authorized its release. This partnership helped PGW enhance its own energy efficiency programs by applying the knowledge learned about home energy upgrades from EnergyWorks. The partnership also provided PGW customers with access to EnergyWorks' loan program. For EnergyWorks, the partnership gave it access to PGW customers for marketing. Learn more about the partnership from the case study [“In the City of Brotherly Love, Sharing Know-How Leads to Sustainability”](#). EnergyWorks found that by the end of their Better Buildings Neighborhood Program grant period, they had identified a successful formula of marketing, outreach, and contractor interface. They wanted their lessons learned to be useful in the future continued working with the city-owned utility, Philadelphia Gas Works (PGW) to develop a new [utility-run energy efficiency program](#). This program built off and mirrored the design of the EnergyWorks program by incentivizing comprehensive, whole-home residential energy efficiency projects. EnergyWorks' role changed to providing training and acting as a general contractor, which gave it more flexibility. PGW was able to provide bigger incentives than EnergyWorks could. In addition, PGW benefited from increased customer satisfaction by offering the program, so the program evolution and partnership was a win-win for everyone involved. For more information, see the U.S. Department of Energy's [Focus Series Interview with Philadelphia Energy Works](#).
- [Michigan Saves](#), formerly BetterBuildings for Michigan, established a partnership with Grand Valley State University (GVSU) to take the program's community-based approach to a new type of community—university staff—through a semester-long, employer-assisted initiative. The program found that the sustainability staff members at GVSU were interested in the program, and program staff described a “sustainability ethic ingrained in the school's culture.” GVSU employees were receptive to the energy efficiency message. University leadership joined in as well, with the provost's office and university president writing letters to staff in support of the program. The school's human resources department helped the program develop a database to manage services to employees. As a result of the program, 215 people working for GVSU (nearly 10% of total employees) signed up for the program. By going through the university, these sign-ups cost one-fourth to one-third of the program's normal marketing cost per person. Sixty percent of the homeowners who participated in the GVSU program undertook home upgrades, which was higher than Michigan Saves' average rate of 44%. To learn more about the effort, see the interview with program leads: [“It's Academic: BetterBuildings for Michigan Partners With University to Reach Employees”](#).

Incentivize the action you want your customer to take

Successful programs know that it is not enough to get customers interested in their services. They know that homeowners that receive assessments but don't undertake upgrades don't receive the benefits of energy efficiency—and programs don't get credit for energy savings. Instead of emphasizing interim steps, these programs make sure their messages and incentives encourage customers to take actions that save energy—whether it is a home energy upgrade, updating heating system, or purchasing energy efficient appliances.

- Early in the [Michigan Saves](#) program, canvassers going door-to-door started their conversations with homeowners by emphasizing the “free stuff” that customers could get if they participated in the program (e.g., compact fluorescent light bulbs, sink aerators, and showerheads). When the canvassers passed leads on to contractors who then tried to market, other measures that customers would have to pay for (e.g., insulation, air sealing, duct work, furnace replacement), these customers felt like they had been signed up for something they didn't agree to. After that, the program modified its messages and incentive structure to reflect the ultimate goal—an energy upgrade. For more information on how Michigan modified the incentive structure of its program, see the case study [Experiment to Find the Right Mix of Incentives](#).
- Recognizing that the concept of home performance was relatively new in Cincinnati, the [Greater Cincinnati Energy Alliance](#) (GCEA) promoted low cost energy assessments through its contractors to generate interest for the program. GCEA found that a high percentage of homeowners took advantage of the low-cost assessments with no intention of proceeding to a home energy upgrade. This resulted in a lower-than-expected conversion rate of assessments to completed upgrade projects. In response, GCEA increased the cost of assessments, which excluded homeowners that were merely curious. As a result, the program's conversion rate increased. At the same time, the program realized that homeowners in the region were not prepared to pay the full market cost for an assessment. GCEA suggests that programs establish a price for home energy assessments that is high enough to reduce the number of homeowners pursuing assessments out of curiosity with little intention to upgrade their homes, but low enough to generate a demand sufficient enough to support a home performance industry. Multiple programs across the country have settled on an assessment price around \$100.
- The goal of [Enhabit](#), formerly Clean Energy Works Oregon, was to achieve at least 15% energy savings in each home, but it designed its rebates to reward even greater energy savings. For example, when rebates for 15% energy savings were \$500, rebates were \$1,000 for 25% energy savings, and \$1,500 for 30% energy savings. These incentive levels contributed to the fact that 85% of those participating in Enhabit's program reduced their energy use by more than 30%. Enhabit's Executive Director reported that “our incentive structure gets customers excited about aiming high and gives contractors a lever to encourage a more comprehensive scope of work.” To learn more about Enhabit's experience, see the case study [Use Incentives to Get Attention and Encourage Deep Savings](#). [Austin Energy](#) offered a similar tiered rebate system.

Provide adequate time for data system development and testing

Many Better Buildings Neighborhood Program partners found that setting up their information technology (IT) systems early in the program design stage ensured that data terms and data entry procedures were consistently applied by all system users. Reaching agreement with stakeholders (e.g., contractors, lenders, marketing partners, evaluators, program staff) on what data the data system would collect, known as system requirements, and how the collected data would be used to evaluate the program helped programs ensure that the data collected was complete. Programs have also found that they receive data of the quality needed for graphs and cost-effectiveness calculations when stakeholders agree up front that the data will be used for these purposes and not just to track energy savings and expenditures.

- [Be SMART Maryland](#) found that transitioning from spreadsheet-based data collection system to a customized energy IT system was crucial to administering a multifaceted energy efficiency program with rigorous data collection requirements. Investing in their system while they were still designing their program allowed Be SMART to smoothly integrate the system into the program's operations and to ensure quality data collection and integrity over time. Be SMART also found that while spreadsheets were useful tools in collecting data, their use in analyzing data and generating reports was limited, since the program had to go through a time-consuming consolidation process to combine data from different sources and spreadsheets.
- In Boulder County, Colorado, [EnergySmart](#) found that it took between four to six months for a database developer and coding consultant to fully develop and test the data system because of its high level of complexity and the customization required. The program also found that having actual users test the system with real inputs and real reporting requirements helped ensure better data quality and user-friendliness. In addition, EnergySmart found that before beginning database development, it was important to reach agreement among stakeholders on what reporting will be expected, and design the database to facilitate building and exporting the reports. For EnergySmart, it was important to set expectations with report recipients about the IT system's reporting capabilities early on in the process, so recipients did not expect reports that the system was unable to produce.

Aim for early wins that give the program experience and showcase upgrades as a way to attract customers

Several residential energy efficiency programs have successfully launched their efforts by focusing on completing early upgrades that build visibility for their program, create momentum, and allow programs to learn how to reach homeowners effectively. This early success provides results that the program can showcase to future customers. Significant program investments and efforts are required to launch any new initiative. In addition to building the internal capacity and infrastructure needed to operate the program, focus early investments on getting the attention of customers, kick-starting the market for contractors, and learning what strategies work to drive demand.

- Early on, [NeighborWorks of Western Vermont](#) conducted a one-night phone-a-thon that offered residents in the town of Shrewsbury, Vermont, a low-cost home energy assessment as a quick way to engage one community. The program was flooded with demand. Sixty-nine assessments and 35 upgrades were undertaken by the 192 households contacted during the phone-a-thon, creating an "early win" for the program. Program staff—describing the process as "go, set, ready"—said this effort helped them learn how to communicate effectively about the program without investing in a comprehensive marketing plan. Getting people talking about the program as a result of community engagement proved to be an effective marketing strategy. A formal evaluation of the program's first three years found that word-of-mouth was the second most reported way that homeowners heard about the program after media articles. For more information, see the case study ["Spotlight on Rutland County, Vermont: How Local Ties Lead to Local Wins."](#)
- [Efficiency Maine](#) offered limited-time incentives to accelerate customer interest and acquisition early in the program and was able to lower the level of incentives as it increased the opportunities for customers to access favorable financing. The program initially offered customers a rebate for 30% of project costs, which could total up to \$1,500 for comprehensive projects that were projected to achieve at least 25% energy savings. The maximum incentive level was \$3,000 for deeper projects that achieved at least 50% savings. To respond to low demand—even with these high initial incentive levels—Efficiency Maine launched an additional, limited-time \$1,000 bonus incentive in the summer of 2010. The offer, available for four months, generated significant customer and contractor interest. When the offer period was over, contractors were able to sustain the level of activity generated by the limited-time offer because the offer had raised the visibility of the program. For more information about the time-limited incentives, see ["Spotlight on Maine: Transition to a Sustainable Level of Incentives"](#).

Recognize customers who make improvements

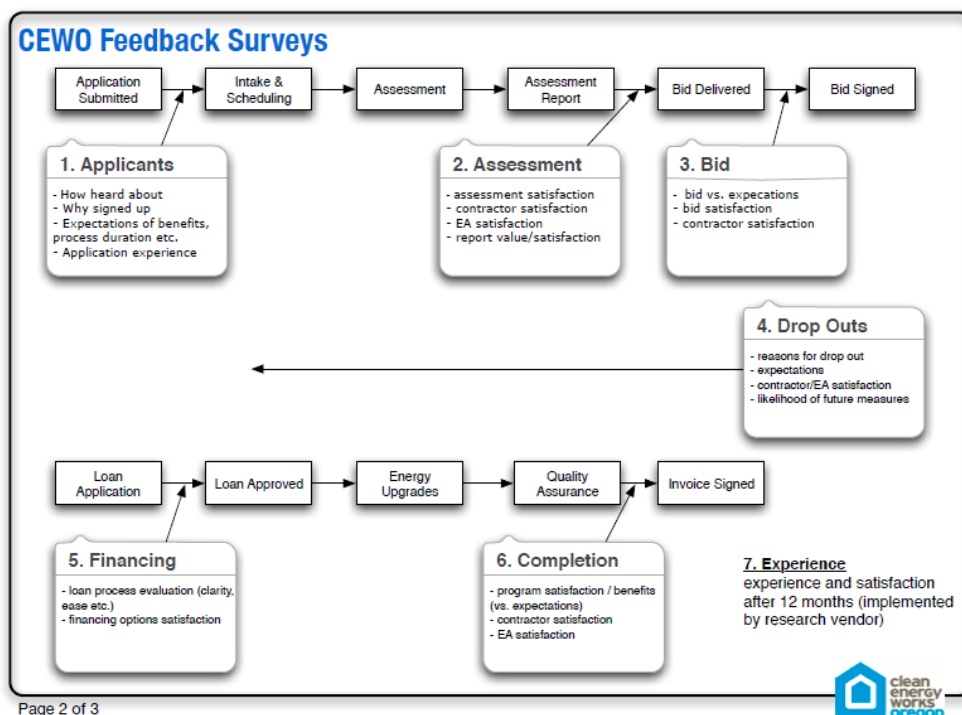
Some programs provide customers with a "certificate of completion" to recognize and reward homeowners' accomplishment in completing an upgrade. Visible awards or affirmation, such as yard signs, window stickers, or favorable comparisons to neighbors can motivate homeowners to undertake upgrades.

- **Energy Impact Illinois**, in partnership with **Illinois Home Performance with ENERGY STAR**, provides a **certificate** to all homeowners who complete a qualifying home energy upgrade and achieve at least 15% energy savings. The certificate includes information on upgrade measures performed and expected energy savings. The Chicago Multiple Listing Service (MLS), which provides information for residential real estate transactions, added a field in 2012 that provides information about the certificate in home sales listings. Program outreach teams talk to residents about the potential for energy upgrades to increase home value at the time of sale. Feedback from homeowners suggests that the certificate, and its visibility in home transactions, was a factor (although not necessarily a primary one) motivating them to pursue upgrades. Some homeowners told the program that they decided to upgrade their homes because they planned to move and felt the upgrade would increase their home's marketability. Residents **clearly valued the certificate**; several contacted the program to inquire about it when it would arrive following their upgrade.
- **Eversource**, a utility serving New Hampshire, Connecticut, and Massachusetts, undertook a pilot study to examine whether comparing homeowners' energy use to neighbors or rewarding them for energy savings were better ways to motivate residential energy upgrades. The utility divided its New Hampshire customers into groups: some received information about their energy usage in comparison to their neighbors and some received rewards based on their energy savings; the rewards could be redeemed for gift cards or charitable gifts. Eversource found that comparing people to their neighbors resulted in greater overall energy savings; however, the rewards group showed more engagement with the program's website, with many more of them creating online accounts. A 2015 Better Buildings Residential Network **Peer Exchange call** discussed the program in more detail.

Measure and evaluate performance at key points in the process

Measuring performance at key points in the upgrade process (e.g., assessments, conversion rates, and financing applications) has helped programs understand where their processes are working smoothly and where they are not. This information has helped them continuously improve their program design and implementation. To monitor progress, successful programs have combined information from their project tracking systems with customer surveys, information from call centers, and feedback from contractors and lenders to understand the customer experience. Make data accessible for program staff to track progress, identify successful strategies, and detect points of failure.

- **Enhabit**, formerly Clean Energy Works Oregon, established an extensive process for getting customer feedback at key points in the program delivery process to evaluate customer satisfaction and better understand why some homeowners chose to undertake upgrades while others did not. The program identified seven points in the program delivery process to gather information through feedback surveys and phone interviews: application, assessment, bid, drop-out, financing, completion, and experience after 12 months. The program credited this kind of customer communication and feedback as one of the keys to its ongoing success.



Source: Clean Energy Works Research Planning, Will Villota, CEWO, 2012 (Presented during January 19, 2012 Better Buildings Residential Neighborhood Program peer exchange call).

- Boulder County's [EnergySmart](#) program sent an online customer [feedback survey](#) to homeowners who had completed upgrades. Among other things, the customer surveys affirmed customer satisfaction and identified the opportunity for word-of-mouth marketing. Surveys found that the vast majority of the respondents would recommend the EnergySmart service to a friend or neighbor. The surveys also surfaced some weaknesses that the program resolved. For example, some respondents noted contractor's lack of response and professionalism as an issue, which led the program to develop [guidelines for professionalism and customer contact](#). Surveys also noted that the assessment report was long and confusing, leading the program to develop a new, customized report that was easier to follow and clearer about next steps.
- Connecticut's [Neighbor to Neighbor Energy Challenge](#) used qualitative contractor and customer feedback combined with quantitative data to [evaluate how well its outreach efforts led to home energy assessments](#). When informal contractor feedback alerted program managers that relatively few interested customers were following through to have assessments conducted on their homes, the program analyzed project data and found that only around a quarter of customers who expressed interest in an assessment had completed one. To diagnose the problem, the program analyzed data to see how customers were acquired, how long it took to send leads to contractors, and how long it took contractors to follow up with customers to arrange for an assessment. Through qualitative analysis, the program found, among other things, that customers didn't understand what they were signing up for and may have been unwilling to say "no" to young and enthusiastic outreach staff. The program also found that its staff wasn't following up quickly enough with people that wanted more information. In response, the program improved its process for distributing leads to contractors (e.g., linking contractors to homeowners in 1-2 days), created a "receipt" for interested customers outlining next steps, and set up a system to call non-responsive leads after two weeks. With these and other steps, the program increased its close rate 35% in one month after changes were implemented.

Offer customers a range of upgrade paths, including single measures and staging upgrades over time

Programs that offered several paths for customers to upgrade their homes—for example through a choice of single or bundled measures, staged upgrades over time, or a comprehensive whole home upgrade—were found to motivate greater homeowner participation and generate higher energy savings, according to a comprehensive [evaluation](#) of over 140 programs across the United States. Providing a limited number of options with different levels of cost and complexity allowed programs to appeal to a broader range of homeowners and contractors.

Including options also provided homeowners with a reference point against which to compare available options.

Information about the program examples below can be found in the evaluation report, [Spotlight on Key Program Strategies from the Better Buildings Neighborhood Program \(Final Evaluation Volume 6\)](#).

- [Austin Energy](#) provided two options for homeowners: mid-tier and advanced-tier. Those that chose the advanced tier received a comprehensive third-party assessment with on-site diagnostic testing and energy modeling; they also received financial incentives to improve energy performance by at least 20 percent. The mid-tier option gave participants a list of eligible measures with point values and specified a minimum total point value that equated to at least 20 percent energy savings. Participants in the mid-tier did not receive energy modeling or advanced home diagnostics. The mid-tier option was Austin Energy's most heavily subscribed program.
- [Los Angeles County's Energy Upgrade California](#) began by offering participants two options: basic path and advanced path. The basic path was a prescriptive set of efficiency measures that would qualify for financing, and the advanced path included a full energy assessment and whole-house energy modeling. The program assumed that most upgrades would occur via the basic path; however, this option had minimal participation because homeowners saw its requirements as being too burdensome. In response, the program created a new [Flex Path option](#) that provided an extensive menu of upgrade options and a \$1,500 homeowner incentive. Despite the fact that the Flex Path rebate was lower than that offered via the basic and advanced paths, the Flex Path met the goal of achieving 500 upgrades in only four months, far surpassing participation in the basic and advanced paths. Fifty-seven percent of Los Angeles County projects were Flex Path, compared to 42 percent advanced path and only 1 percent basic path. More than 80 percent of participants reported the availability of the Flex Path incentive was important in their decision to move forward with energy upgrades,
- [Efficiency Maine](#) structured its incentive program around two upgrade options: a comprehensive project path and a simpler prescriptive project path. The comprehensive project path included two tiers of incentives, based on the expected energy savings from an upgrade. Participants who chose the prescriptive project path received a \$400 incentive to cover the assessment and air sealing, and could earn further incentives for additional measures. The prescriptive path allowed homeowners to take a phased approach. It provided incentives to homeowners that underwent an energy assessment, completed air sealing, and installed at least one other energy upgrade measure. Approximately 40 percent of Efficiency Maine's projects went through the comprehensive path, and 60 percent used the prescriptive path. Energy savings for the two paths was similar, at approximately 25 percent average savings per project.

Directly install measures during the assessment

Programs that enabled contractors to install energy saving measures during the home energy assessment were more successful than those that did not. Based on a comprehensive [analysis](#) of over 140 programs across the United States, programs that provided direct installation of some low-cost measures and had relatively larger pools of eligible upgrade contractors were more successful than other programs. Common low-cost measures, usually installed during an assessment, included LEDs, low-flow showerheads, and faucet aerators. These small upgrades served as both sources of energy savings as well as “sweeteners” to encourage participation in the assessment and encourage homeowners to explore future, larger upgrade projects. These measures also enabled programs to claim energy savings before a lengthy upgrade process. Direct installation measures have a high customer satisfaction rate, and as such could motivate homeowners to participate in the program. More information about the program examples below can be found in the evaluation report, [Spotlight on Key Program Strategies from the Better Buildings Neighborhood Program \(Final Evaluation Volume 6\)](#).

- Boulder County, Colorado's [EnergySmart Program](#) enabled contractors to directly install low-cost measures, such as compact fluorescent lights, showerhead and faucet aerators, and water heat pipe insulators. These low-cost direct install measures contributed to the 75 percent of households that enrolled in the program that made one or more energy efficiency improvements through the program.
- [Efficiency Maine](#) offered a statewide [Residential Direct Install \(RDI\) incentive](#) that [encouraged homeowners](#) to conduct an assessment as well as energy efficiency upgrades by providing a \$600 rebate for at least six hours of air sealing and insulation work. The RDI incentive was launched in order to provide immediate savings by identifying and addressing the most urgent issues in the home. During the RDI incentive period, contractors were able to reduce home air leakage by an average of 17 percent in as little as six to ten hours.

Examples

The following resources are examples from individual residential energy efficiency programs, which include case studies, program presentations and reports, and program materials. The U.S. Department of Energy does not endorse these materials.

Case Studies

[Spotlight on Austin, Texas: Best Offer Ever Produces Upgrades in Record Time](#) (555 KB)

Author: U.S. Department of Energy

Publication Date: 2011

With its Best Offer Ever promotion, Austin Energy completed comprehensive energy upgrades in a record 564 homes in only six months--more than 10 times the utility's typical participation rate. To quickly develop momentum for BetterBuildings-Austin Energy's Clean Energy Accelerator program with homeowners, Austin Energy leveraged its existing Home Performance with ENERGY STAR infrastructure, experience, and contractor base but added a comprehensive rebate/financing offer for a finite launch period. Demand soared, and due to thoughtful planning, Austin Energy and its contractors were able to keep up with requests for energy assessments, inspections, improvements, and loan origination, while learning valuable lessons along the way.

Program Presentations & Reports

[Community Power Works of Seattle Planning Presentation](#)

Author: Community Power Works

Publication Date: 2010

This planning document from Community Power Works of Seattle, Washington, includes flow charts and tables designed to help guide both the initial launch of the program, which includes setting goals, and its ongoing development.

Program Materials

[Austin, Texas: Project Timetable](#) (34 KB)

Author: Austin Energy

Publication Date: 2010

A project planning timetable template from Austin Energy that reflects all program planning activities, including marketing.

[Michigan Saves Program Overview](#)

Author: Michigan Saves

Publication Date: 2010

A brief overview of Michigan Saves' program design that features a diagram of the program process and cash flows.

[NYSERDA's Home Performance with ENERGY STAR Process Flow Charts](#) (23 KB)

Author: New York State Energy Research and Development Authority

Publication Date: 2010

Two visual flow charts, one that illustrates the process starting with customer interest to final incentive payment, and another that illustrates the program's quality assurance process.

[Program Design Flowchart for Eagle County, Colorado](#) (55 KB)

Author: EnergySmart Colorado

Publication Date: 2011

Example of a program design flowchart showing key steps and relationships for the energy efficiency program in Eagle County, Colorado.

[Program Design Flowchart for Greensboro, North Carolina](#) (152 KB)

Author: BetterBuildings for Greensboro

Example of a program design flowchart showing key steps and relationships for the energy efficiency program in Greensboro, North Carolina.

[Project Implementation Plan: Colorado Retrofit Ramp-Up Project](#) (275 KB)

Author: EnergySmart Colorado

Publication Date: 2011

Boulder, Colorado's EnergySmart program produced a detailed implementation plan with activities, deliverables, and timelines by phase and task.

[Seattle Community Power Works Implementation Plan](#) (595 KB)

Author: Community Power Works

Publication Date: 2011

Example of an implementation plan developed by Seattle's Community Power Works at the beginning of the implementation of its Better Buildings Neighborhood Program.

Toolbox

The following resources are available to help design, implement, and evaluate possible activities related to this handbook. These resources include templates and forms, as well as tools and calculators. The U.S. Department of Energy does not endorse these materials.

Templates & Forms

[Better Building Residential Program Implementation Plan Template \(Word Version\)](#) (2 MB)

Author: U.S. Department of Energy

Publication Date: 2015

The Better Building Residential Program Implementation Plan Template will help you develop a strategy for planning, operating, and evaluating a successful residential energy efficiency program. The template includes sections for all six program components (i.e., Market Position & Business Model, Program Design & Customer Experience, Evaluation & Data Collection, Marketing & Outreach, Financing, and Contractor Engagement & Workforce Development).

[Better Building Residential Program Implementation Plan Template \(Excel Version\)](#) (66 KB)

Author: U.S. Department of Energy

Publication Date: 2015

The Better Building Residential Program Implementation Plan Template will help you develop a strategy for planning, operating, and evaluating a successful residential energy efficiency program. The template includes sections for all six program components (i.e., Market Position & Business Model, Program Design & Customer Experience, Evaluation & Data Collection, Marketing & Outreach, Financing, and Contractor Engagement & Workforce Development).

[Better Building Residential Program Implementation Plan Template - Program Design & Customer Experience](#) (2 MB)

Author: U.S. Department of Energy

Publication Date: 2015

The Program Design & Customer Experience Implementation Plan Template will help you develop a strategy for planning, operating, and evaluating your program design activities.

[ENERGY STAR Implementation Plan Template](#)

Author: U.S. Department of Energy; U.S. Environmental Protection Agency

Publication Date: 2014

This tool from Home Performance with ENERGY STAR provides a template to develop an implementation plan for your program.

Tools & Calculators

None available at this time.

Topical Resources

The following resources provide additional topical information related to this handbook, which include presentations, publications, and webcasts. Visit [Examples](#) for materials from and about individual programs.

Topical Presentations

None available at this time.

Publications

[Home Performance with ENERGY STAR Sponsor Guide and Reference Manual \(v1.5\)](#)

Author: U.S. Department of Energy

Publication Date: 2014

The Sponsor Guide was designed to assist with developing an implementation plan for a Home Performance with ENERGY STAR program. It covers key elements of the plan, including the scope and objectives of the program and the policies and procedures that will ensure its success. The Sponsor Guide is divided into seven sections, each covering a specific requirement of the HPwES Program: Use and Management of the Home Performance with ENERGY STAR Mark, Program Design and Development, Workforce Development and Support, The Assessment, Project Installation, Quality Assurance, Tracking and Reporting.

Webcasts

None available at this time.

